

SUGARand PLANTATION



SUGAR PRICES FALL WITHOUT REASON

New York Market Should Be Better With All Facts Considered

Export Orders Were Heavy But Less Confidence Shown At Future

Willet & Gray report the sale of 406,000 bags of Cubas, Porto Riess, Surinam, Peru and San Domingo raws and 1600 tons Peru and San Domingo report in part states that during the week, Cubas remained at 4.89c, while Of course if Cubas were free of duty their market value would be the same as the Porto Ricos, but by reason of being available for use in the production of refined for export, the Cubas command the higher value, and the full-duty sugars for the same reason are of higher market value than the

Explanation of Prices

The fact of there having been and still continuing, and expected to be con-tinued, a good demand for refined for export, the sugars which pay a duty will continue to command a higher market quotation than free-duty sugars which can be used only for the direct consumptive demand, which just at present is over supplied by refiners surplus production.

After a good proportion of an 85,000 bag lot of Porto Ricos which had been pressing for sale had been absorbed a new demand for retined for export, including sales of 55,000 tons granulated, gave a strengthening tone and tendency and the sugar industry is returning, to the market. The sales of refined Francis M. Swanzy said yesterday. for export are understood to be in part at 4.65e f. o. b. net cash, in bond. No Rebate Now

The treasury department has issued an order to Customs Collectors that will not last. to continue to collect duties on sugar in full, without making the 5% discount allowance, and to suspend liquidation pending the decision of the United

States Supreme Court. As the suspension of liquidation, as inconvenience to importers and refiners, especially in their export drawback business, an effort is being made to have new orders issued permitting liquidations as heretofore and subject to re-liquidation on the decision of the Supreme Court, if necessary.

The Cuba crop making has gone on during the week, but receipts are below ast year 22,000 tons against

The visible crop is now 2,323,713 tons against 2,384,223 tons last year to same

Total Cuban Exports

The week's exports to Europe were 9000 tons, bringing the total to date to about 220,000 tons from present Cuba crop, against entire total from the last Hungarian beet districts indicate very crop of 304,565 tons.

Mails from Australia report further unfavorable weather, leading to a reduced crop estimate to 150,000 tons. June 28 showed there has been too Australia expects a shortage in supplies of sugar about August, which is expected to be made up from Java. Sugar Cargo Lost

r'ress reports state that the British steamship Scottish Monarch, from New ult., off the Irish coast by a German submarine.

At the close, the market is steady Pacific Coast Receipts and firm at full-up quotations, with tone and tendency towards further im to June 21 have been 209,161 tons of provement.

retined has remained unchanged. For 3550 tons from the Philippines. foreign export business the enquiries

British Buying Statistics of Great Britain's sugar

nt 4.65c, net cash in band, f. o. b.

position on June 1 gave indications of this demand and a continuance of it to a quite considerable extent for supplies throughout July and August. This relief or contraction of supplies

for our local trade consumption must be considered as indicating firmness and probably some improvement to the present quotations. Full stocks should

German Beets

F. O. Licht reports on the German

situation June 4 as follows: The week opened cool and cloudy, with light showers in the south and pare of the east and coast. Later it was warmer and generally dry. Under these conditions field work suffered no interruptions. The first hoeing is practically finished except in the north, while for the most part thinning is also fin ished. The latter work was especially easy and successful in many Central and East German sections owing to the dry conditions, which it is constantly hoped will soon be ended by heavy rains. As to the present progress and stand of the beets, current, reports are penerally satisfactory, but especially in Central Germany warm showers are The Dakotan now loading at title will take a long season of bad weather to greatly needed if this condition is to leave Thursday for Atlantic ports with nullify the gains already made.

Solution of the plantations are now tottle will keep for years, and as satisface. He had recently arrived to

INDIA'S POOR CANE HOLDS YIELDS DOWN

C. A. Barber, of the College of Agri culture at Coimbatore, in a recent publication states that the cane sugar industry in India is in an nusatisfactory condition. Most of the better class canes are heavily diseased, or, as in Madras, they are grown on a very small scale. The hardier and most commonly cultivated varieties are among the poorest in the world.

The remedy, according to Professor Barber, lies in developing drought re-sistant seedling capes which will be better producers than the native varieties now grown and will also prove more re-sistant to disease and insect attacks. Microscopic Cane Fields

There are few cane fields in India much over an acre in extent and many during the week ending July 1. Their are under that area, nevertheless this is one of the greatest, if not the greatest, sugar country in the world. There are the Porto Ricos declined to 4.80c per a few modern plantations operated on Ten Thousand Boy Delegates a larger commercial scale, but the system of land tenure and the dense overpopulation of the country precludes any material extension of the sugar industry along these lines.

Improvement, if it comes, must be through the education of the Indian ryot to a better standard of farm prac-

CONFIDENT OF FUTURE

Nothing Ahead of Sugar Industry Which Any Man Need Fear

"Confident in the future of Hawaii "People seem to be becoming 'acclimated' to the idea that although we will have free sugar so far as anyone now knows, May 1, 1916, that is a condition

"It would seem that men are continually standing on the brink of some terrible catastrophe and yet when the time comes it does not happen. ing back at the history of the business as I have seen it develop, there has above, would cause indefinite delay and always been something looming just ahead, of which all men were in fear Nevertheless we have passed many of these emergencies without realizing the moment when they faded behind

> 'Our people have gained confidence That is reflected in the increased business on the local exchange. Hawaii has only needed confidence in itself and that period of confidence has now ar

> "Hard times!" Mr. Swanzy said,-"Hawaii does not know what 'hard times' means. This country has every advantage in its favor and there should be no doubt or hesitation as to what the future has in store.'

general lack of rain.

Domestic Situation Weather conditions as reported up to much rain with low temperatures in

weather in cold and dry. It is reported from Billings, Montana, York June 16, with a cargo of about that the sugar company is understood 7000 tons refined sugar for Manchester, to plan paying a higher price for beets England, was sunk on Tuesday, the 29th in the fall than the contracts already made call for provided the price o sugar remains at its present level.

Receipts at San Francisco January which 200,340 tons was Hawsiian, For local distribution the situation of 4315 tons from Java and Mexico, and,

A table has been compiled showing turned into actual orders, and a large the average cost and freight price of business resulted to England, to extend Cubas for the eighteen years ending of some 55,000 tons, understood in part January 1, 1915 has been 2.552 cents The average since the Reciprocity Treaty, December 27, 1903 has been 2,658 cents. The lowest price since 1890 was 1.565 cents in 1902 and since the Reciprocity Treaty 1.875 cents in 1913. The highest since the Reciprocity

Trenty was 5.505 cents in 1914. A Bear Market Sales of raw sugar futures totaled 28,850 tons for the week ending June Prices all glong the line were Closing bids were 3.87 July 3.96. August; 4.64, September; 4.09. October; 4.05, November; 3.79, December; 3.49, January, 1916; 3.40, February, March and April; and, 3.50 May.

Trust Gets Injunction On June 23, the American Sugar Re fining Co. filed an equity bill in the United States District Court at New Orleans with the intention to have the Supreme Court of the United States pass on the constitutionality of the recent laws enacted at the special ses sion of the Lousiana Legislature.

Judge Poster issued the restraining order pending the hearing on the bill

EUGAR FACTORS' SHIPMENTS

To date this month the Sugar Factors company has shipped 23,000 tons released the remaining 15 per cent of Friday, July 16, and is due to sail July winding up their grinding season and bonne is complete without it. For sale

TOP NOTCH CLUB MEETS IN AUGUST

Hawaii Not Represented At National Convention At San Francisco Next Month

The Top Notch Farmers' Club, a naional organization of farm boys and girls, are going to hold its annual convention in San Francisco August 5 and

To become a member of this club any one is eligible who can produce authen tic records of having grown on one acre of land one hundred or more bushels of corn or oats, fifty or more bushels of wheat, four hundred or more bushels of potatoes, or six or more tons of alfalfa

A. P. Sandles, president of the Obio agricultural commiscion, will have full charge of the exen-sion. Ten thousand delegates have been chosen to attend the convention, and if they all go San Francisco will see more farm hoys the first week in August than many urbanites knew existed.

To be an officer in the Topnotcher's lub the boy representing his state has o have a cracker jack record. The first vice-president of the national club is Walker Lee Dunson of Alahama, whose cord is 232.7 bushels of corn grown n one acre. Thirty three States have been accorded vice presidents. States not represented have not as yet reduced the boy with the hundred tushel record. Connecticut was the last State to get a vice president in N. H. brewer of Hockanum with an even one bundred bushels.

Philippines But Not Hawaii The Philippines has a vice president, lemetric Casuels of Leon, Hoile, with a 109 bushel record, which is ahead of North Dakota, Missouri, Arizona, New Jersey, Oklahoma and Connecticut. Hawaii is not represented on the offirial board and so far as known there are no members in this Territory. If there are The Advertiser would like to publish the fact.

The mission of the National Top-otch Frimers' I lub is to fire the ambition of the farm boys of the United States to attain to the highest standand of excellence in the production of large yields of the leading crops.

What It All Means The promoters had in mind in per-feeting this organization the latent energy, the hidden power and the great possibilities and undeveloped dynamic forces wrapped up in the farm boys of the I'nited States.

The boy of today is the man of to

the schooling that spells success on the scientific authorities. farm will not be the least of the questions that receive the careful attention of the present members of the National Ton Notch Farmers' Club,

Sweeping reforms in farm managemeat will be the order of the day when the army of top notch farmers of the practically all the sugar beet districts nation are fully organized and equipped of the United States. The comparin for the most important service that ever has begun at Visalia. California engaged the attention of a peaceful na-

Tomorrow's Gigantic Task

assemble in the United States for their

The delegates to the San Francisco convention by been appointed by the lovernor of each State in the ratio It would be a good thing for Hawaii if there were a few eligibles in the ranks of the corn, potato and alfalfa growers.

SEASON BEST EVER FOR THE THREE CROPS

Average weather conditions through out the group are reported to be above the average for this season of the for harvesting the remainder of the erop. The final outturn on all plants of the Hawanan planters.

All of the agencies repo ago had any right to expect. No one has any hard luck story to tell.

So much for 1915. The 1916 crop is looking fine. The 1916 cane had a had start on account of the floods of rain that deluged all the plantations a vent ago, but what was lost in the begin aing has been more than made up now. A favorable harvest season always

neans a good start for the plant care. According to the reports that are comng in there is not a district in the Islands but where the 1917 came is because it reliaves cramps in the -time making a splendid start and it would sele and insectional pains quicker than Control Germany warm showers are The Dakotan now loading at Hilo will take a long season of had weather to any preparation they can compound it

SU**BSOIL**ING COSTS PERUVIAN SUGAR MORE THAN WORTH HAS GREAT FUTURE

Science Again Overthrows Old Chance For American Capital and William P. Brien, In Charge of Willard S. Terry Seriously Burned Ideas On Correct Cultivation Practise In Fields

The operation hown as "bastard has been long practiced in Europe, has been recently investigated from a scientific standpoint, to determine whether it is worth while

"Trenching" across the field and then carrying the exeavation broadenie as it were, until all the soil is thoroughly mixed. The top layer of earth as thrown in the bottom of the trench and the bottom laver or "spit" comes to the surface. nure is also thoroughly mixed with the

What Method Is In "bastard" trenching the land is litched in the same way but the bottom spit is left at the bottom and the top spit at the top. As stated above the practise has been extensively followed in Europe where the claim is often made that it is necessary to good

crop husbandry. Experiments conducted in England by Pickering and Rossell of Cambridge University for a series of years on all characteristic types of soil from light sandy to stiff clay indicated that loosen-The ling the bottom spit without manuring it has little appreciable influence on crop preduction.

Frequent analysis were made of the menters stated in their report that there was only slight increase in the moisture content of the subsoil and the amount of available nitrogen.

No Real Gain Crops grown on the trenched fields were in many instances no better than these grown on plowed land not subsoiled. The actual increase in moisture content and nitrate content of the subsoils es a result of bastard trenching was so small that it was well within the limits of experimental error. Nor did it alter the distribution of plant

food between the su-face and subsoils. They state their belief that the character of the season, the amount and distribution of the rainfall, the amount of cloudiness and sunshine, the rate of evaporation, and air temperatures and hunidity have far more to do with the oil moisture, the distribution of plant food in the soil and the final crop production than the loosening, subsoiling or bastard trenching of the fields.

An Expensive Practise Pickering and Russell state that "the morrow, and the successful leaders of bractical conclusion may be drawn that agricultural promotion of the present bastard trenching or deep subsoiling, by day will pass on to their reward, and itself without the addition of manure to farm boys that now prides himself on about any sufficient change in the soil pure saccharine, 1871; glucose, 0.45. his membership in the National Top to justify the trouble and expense of Modern Industry is Young the operation.

Gigantic tasks in feeding the nation The opinion of these two agricultural in 1570, and for a long time was will need to be accomplished. Soil experts carries weight, for they both grown on a very small scale. The presfortility and permanent agriculture and stand in the front rank among modern ent sugar industry dates back only to

known that in a case field the feeding i still being imported to supply the in roots are mostly near the surface. The fixeal consumption. feeding roots of plants never go very deep if there is water, plant food and aeration in the surface soils.

Ideas on the methods and need of cultivation especially on irrigated lands where the soil is seldom disturbed are more nearly the correct practise than many have imagined. Where there is The farm boy of today must provide an impervious, water-tight hard pan to the food for the hundred millions of impede drainage, subsoiling is justin becole that are now fed at Uncle Sam's able. Where there is no hard pan and table, and it will not be long before a where no attempt is made to put ma nation of two hundred million will daily nures and fertilizers deep down into the ground, and soiting is probably in many cases a needless expense. Subsoil Moisture

The fields must of course be plowed deep enough to permit furrowing for f not more than three boys per county. | planting, but with the feeding roots of the cane always reaching up towards the surface there is probably no real need for the excessively deep plowing and subsoiling so long practised on the

irrigated plantations.
Experiments at Waipio have shown almost uniform moisture content in the subsoils to the depth of many feet. With what is being bearned of soils in general and Hawaiian soils in particular ravian soils are unesually rich, and it is quite probable that their moisture, where water is available are extremely content is in all cases governed by other causes than plowing and cultivation. ...

BAG SITUATION BETTER

C. Brewer & Company have received word that the Tenyo Maru will bring From all districts reports are the entire balance of the sugar bags coming in promising ideal conditions ordered for this crop. This ends what has been a difficult situation for some

All of the agencies report that conmade the official estimates six months tracts for next year's bag supply were made some months ago, before the Rus stan war or lers boosted the price. Hence with the steady improvement in the transportation situation in the Pa cific full supplies for next season will needed.

SUPPLIED BY ALL CHEMISTS.

Physicians prescribe Chamberlain's Calle, Chalera and Diarrhoea Remedy

Enterprise To Develope Great Industry

Sugar cane is grown in all parts of trenching," or hand -identiting, which Peru, where the climate is warm, but its center of cultivation is in the coast region. This coast region is a plain 1400 miles long by thirty to forty miles wide and is formed by the erosion of the western base of the Andean plateau. Excepting in the extreme north it is very dry, but it is crossed by some sixty valleys of great back of the city. fortility. The rivers which water these valleys bring down enormous quantities of water during the seasons of heavy rains and of melting snows, the greatest number of them, however, drying up during the rest of the year. Much of the land is alkaline in character. The cane land is rich in lime, phosphoric acid, potash and nitrogen: Hawaiian Cane Failed

Three native varieties of cane are grown, the white, green and purple. Hawaiian and Demawara varieties in troduced there have not proved any improvement over the Peruvian canes. Sucro-e in the cane averages well up,

from 15 to 17.5 per cent, depending on good and pure and is easily manufactrigger. Death was instantaneous. The sugars produced in Peru soils at different depths. The experi- are light colored, rather coarse grain, with high polarization and generally of easy crystallization.

Sessons are as Here and twenty four months to ripen the cane. Yields up to ninety tons per them good bye, but the wit acre are not unusual. Some planta- picton of his intentions. tions average sixty tons or more per awakened by the shot this morning. nere. The average yield for all Peru-vian plantations is declared to be about forty tons of came per acre.

There are a number of large plantations fully equipped with modern mils grinding chiefly their own cane. A few centrals depend on cane grown by in- MAUI dependent cultivators. The growers receive from thirty to fifty per the sugar in payment for their cane. Continuous cutting and grinding are practised on the big plantations Cene Analysis High

The cane is remarkably free from disease. The worst pest is the moth-horer. Plagues of caterpil'ars some-

practical conclusion may be drawn that of Peruvian cane, stating that it repre ' publishes the fo'lowing analysis months ago. sents about an average: Sugars, 15.77 day will pass on to their reward, and itself without the addition of manure to fibre, 15.00; water, 66.02; density their places will soon be taken by the bottom spit, is not liable to bring Pennue, 11.7; brix 20.87; purity, 89.68; Segar cane was first brought to Peru

about 1880. The export production is Modern agricultural science teaches now well up towards 200,000 tons, that the top soils are the richest. It is mainly 96 degree raws. White sugar

Peru a'so produces 2,500,000 gallons alcohol and enormous quantities of rude and deadly cane rum knows as chancara," all of which is consumed the country

In 1910, 16,977 laborers were emloved on the plantations at an aveage daily wage of sixty cents gold -- is one refinery in Peru which in 1917 produced 22,525 tons of white

Great Things Predicted

Peru, in the opinion of many sugar men is destined to become the great est sugar producing country in the two There is declared to be Americas. dendid field awaiting investors in this industry. The conditions for inlefinite extension of the industry are ready for those who have knowledge of sugar production and sufficient capital The problem is that of impounding freiert flood water for continuous initiation during the dry season. reality the dry season, as far as elementic conditions hold, is continuous, the so-called wet souson being the perind when the rivers are in flood from the melting Andean seow fields. Pe-

SUBMARINE FOR SPAIN

feetile. It is a land of abundant sun

shine and moderate temperatures and

- said to be ideal for cane.

(Associated Press by Federal Wireless.) OUTNOY, Massuchusetts, July 12-The Fore River Shipbuilding Company has started building a 750 ton M type submarine for Spain.

*** WAILUKU EXCEEDS ESTIMATE

Washiku Surar company finished conding its 1915 eron of 19,140 tons July 10. Last year's crop was 16. probably arrive long before they are long tons, while the manager's estitons. The outturn is, therefore, \$100 tons hister than had been anticipated six months ago.

11 Bode of Cincinnati, a brother if I but II D. Bode of this city, died in San Francisco vesterday afternoon from numeries sustained by being struck California from Handluby where he the contingent for inland consumption. 27 with a full cargo of 11,000 tons. a majority will probably complete their by all dealers. Benson, Smith & to. but been to attend the wedding of his Reports from the Russian and Austro Her destination will be the east coast. harvest before the end of August. Little, agents for linwaii. brother to Miss Helen Spubling.

HILO PLANTATION

Kaumana Section, Takes His Own Life

(Special By Mutual Wireless) HFLO, Hawaii, July 13.—The funeral of the Inte William P. Brien, section luna in charge of the Kaumana portion of the Hilo Sugar Company, who committed suicide at an early hour this morning, was held this afternoon at three o clock from the First Foreign Church, Rev. George Laughton, pastor, officiating. Interment took place in the Homelani cemetery, on the foot hills

The service was conducted in accordance with the Masonie ritual for the dead, members of Kilauca Lodge No. 330, F. & A. M., of which the deceased was a member, attending. The funeral was largely attended. Out of respect to the memory of the deceased, the regular meeting of the Hilo Board of Trade, which was scheduled for two o'eleck this afternoon, was postponed to a later date.

Brien, well known in the plantations throughout all Hawaii, committed suieide by shooting amself.

At five a clock this morning he went back to his house at Kaumana, secured cultivation. Generally the case has a 45-caliber rifle, held the muzzle of much fibre, low moisture content and the gun against his forehead over the plenty of sugar. The juice is generally right eye and with a stick pulled the

Brien had been dejected and suffering from slight delusions for some time. He had no financial or family troubles of any sort so far as is known. He had en married but two years. Last might It requires from sixteen to eighteen before retiring he kissed his wife and their two month-old baby and bade them good bye, but the wife had no sus-They were data.

Brien was about forty years old, a native of Scotland and had been a resident of Hawaii for more than twenty vears.

CROP

Alexander & Baldwin received by wireless vesterday the final figures on the Maui Agricultural crop for 1915. from tons July 8. This is the biggest crop mother ever harvested. The 1914 total was 33. 660 tons. The estimate, January 1, times destroy the fields, and the field, 1915, called for a total of 34,000 tons, rat causes some injury
Carlos R. Paz, in his book, "Peru To- in excess of what was expected six

> MANCHURIA BROUGHT BAGS The Manchuria arriving yesterday brought 2100 bales of sugar bags as one

very important item of her cargo.

CONVINCING CURE OF SKIN TORTURE

Slight Rod Eruption Grew to be Terrible - Sleeploss Lights and Restless Days Made Life a Burden -Was Completely Discouraged.

CUTICURA CURED AFTER 16 YEARS OF SUFFERING



"For dixteen long years I have been suffering with a bad case of skin discase. While a child there broke out a red sare on the logs just in back of my knees, eaused by a tight, colored ghrer. At first it steemed to be a slight-affair but gradually it waxed from bad to worse, and at least I saw I had a bad a. in discase. I tried many house remedies and clso many widely known dectors in different cities but tome satisfactory result.

ferent cities but tome satisfactory result.
The plague bethered me more in warm weather than in winter and being on my log joints it made it impossible for me to walk, and I was forced to stay indoors

to walk, and I was forced to stay indoors in the warmest weather.

"My hopes of recovery were by this time speak. Siespiess nights and restless days made life an unbearable burden. At hist I was advised to try the Cuticura Remedies and I did not need more than a trial to convince me that I was on the road of sincees this time. I bought two sets of the Cuticura Remedies (Cuticura Scap, Cintment and Pilis) and after these were gone I was a different man entirely. The Cuticura Remedies certainly did a great deal for me, as it changed my whole career from bad to good. I am now the happiest man that there is at least one true cure for skin diseases. Leonard A. Hawtef, 11 Nostrand Ave., Brooklyn, N. Y., July 30 and Aug. 8, 1906."

Rest and peace fall upon distracted households when Cutieura enters. All that the fondest of mothers desires for the alleviation of her skin-tortured and diafigured children is to be found in warm baths with Cuticurs Soap and gentle anointings with Outleurs Ointment, Guaranteed ab-olutely pure and may be used from the hour of birth.

Cuticura Sonn (15c.), Ointment (50c.) Receivers (50c.), and Chorolate Custed Pilm (25c.), are said throughout the world. Potter Drug & Chem Corp., bole From. 137 Columbus Ave., Roston.

37 Mailed From Cuticura Book on the Custed Sain Biasana, 35 pages of invaluable solving.

HILO COFFEE MAN LUNA A SUICIDE INJURED IN HUNTING

In Eyes and Face By **Bursting Cartridge**

HILO, Hawaii, July 13 - (By Special Mutual Wireless to The Advertiser.)-Willard S. Terry, manager and proprietor of the Hilo Coffee Mills, was seriously injured in the eyes and face inte yesterday afternon through powder burns while out hunting with a shot gun near the old crater at the

Kilauen Volenno. A cartridge missing fire, Terry attempted to extract it, ramming it through the barrel of the gun from the breach. In some unexplainable manner the cartridge exploded, the powder burning the hunter's eyes and face. While the burns were serious, it is be-Reved that Terry will recover shortly and that his sight will not be impaired, He was hurried from the Volcano to the Hilo Hospital in a special automohile and is now reported to be resting

The wood-oil, or Tung-oil, of China and Japan is derived from the nuts of several species of Aleurites closely related to the Hawaiian kukui. The species are montana, Fordii and cor-

To make wood-oil the nuts are first; ground or crushed, roasted in shallow pans, and then steamed. The steamed mass is then made into cakes covered with straw matting and these are press-The yield of oil averages about AGRICULTURAL'S RECORD torty per cent of the weight of the

kernel. Wood-oil is the common paint oil of all China and is also used in varnishes. It has a higher specific gravity than any other vegetable oils except easteroil and tallow-seed oil and is characterized by its high viscoscity.

Oil Finds Special Uses Its principal uses in the United States are in the manufacture of driers." These are compounds of the fatty acid of the oil with lead and manganese, and are known as "tungate driers." Tung oil, or wood oil, is also used in the manufacture of linoleum, rubber substitutes and water-proof paper. The well-known "Japanese umbrella" is covered with paper which has been water-proofed with wood-oil.

It is quite possible that the difficulties which have attended the sale of ui oil made in Hawali have been due to misapprehension as to just how the oil is used in making paints. It is not a substitute for linseed. The preliminary rousting of the nuts before the oil is pressed out of the cake has something to do with producing the viscid, 'sticky' quality which the 'rade expects when it buys oils of this

·lass.

The Chinese Kukui The Chinese Tung oil is worth more than the oil which comes from Japan. The tree. Alcurites Fordii, grows on a-by hillsides all through southern China, in drier locations than the Hawaiian kukui which it much resembles. In China this tree is only planted where other cultivation is impossible. It is set in groves, or orchards, about twenty feet apart each way. The nuts are gathered from the tree just before they are ripe and are piled in heaps and covered with grass and straw. The green outer covering quickly rots and falls away. The nuts are then ground in stone mill wheels and treated as

less ibed above. This difference in handling the nuts eav be just the point where failure has resulted for those who have experimented with the manufacture of kukui oil. If a successful industry is to be established in Hawaii it apparently needs more capital than has hitherto been available. Also there is robably more to it than simply gathering the nuts which have fallen on waste lands and pressing the oil out

of them: It must be kent in mind that similar i's are strongly entrenched in the trade where they have a recognized status and use for certain definite purposes. The objective in creating a narket for kukui oil is therefore along those same lines and in this trade rather than to attempt to get the prod-

of used for something else. Wood oil is in strong demand, but bekui all cannot become a competitor with it unless it approaches it in qual-Hence there is need of further studies and further experimentation to Heraver whether the Hawaiian product ... w has there desirable qualities which the trade demands, or if they are lacking whether they can be readuced by occuper treatment of the kukui nuts be-

are the oil is extracted. 14-1 inc the note while still green no have samething to do with it, or for menting them in piles or the roasta and stenning process. Putil these ottors have been investigated not all at you take that engly to be to prove atother the foliai oil industry is possible in Hawaii.